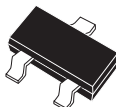


**CMPF4391**  
**CMPF4392**  
**CMPF4393**

**N-CHANNEL JFET**



**SOT-23 CASE**

**Central**™  
Semiconductor Corp.

## DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPF4391 series types are N-Channel Silicon Field Effect Transistors manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for switching applications.

**Marking Codes are 6J, 6K, and 6G Respectively.**

## MAXIMUM RATINGS (T<sub>A</sub>=25°C)

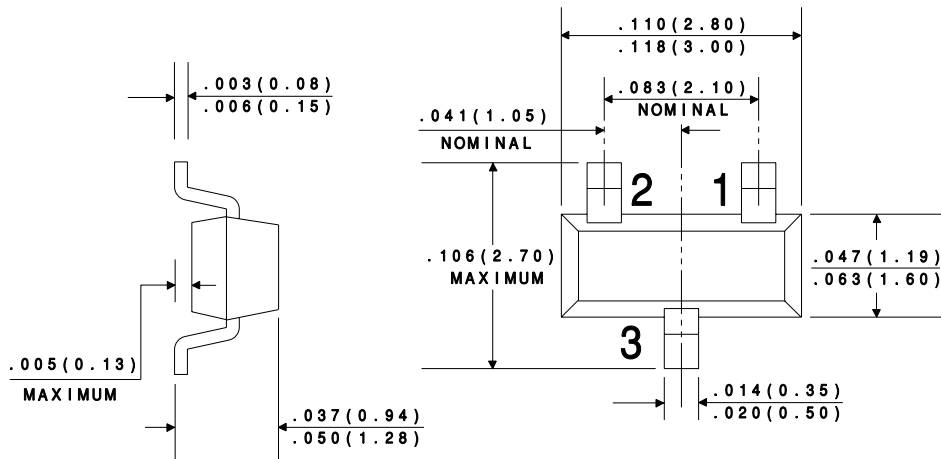
	SYMBOL		UNITS
Drain-Gate Voltage	V <sub>GD</sub>	40	V
Gate-Source Voltage	V <sub>GS</sub>	40	V
Drain-Source Voltage	V <sub>DS</sub>	40	V
Gate Current	I <sub>G</sub>	50	mA
Power Dissipation	P <sub>D</sub>	350	mW
Operating and Storage			
Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	θ <sub>JA</sub>	357	°C/W

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	CMPF4391		CMPF4392		CMPF4393		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
I <sub>GSS</sub>	V <sub>GS</sub> =20V		0.1		0.1		0.1	nA
I <sub>GSS</sub>	V <sub>GS</sub> =20V, T <sub>A</sub> =100°C		0.2		0.2		0.2	μA
I <sub>DSS</sub>	V <sub>DS</sub> =20V	50	150	25	75	5.0	30	mA
I <sub>D</sub> (OFF)	V <sub>DS</sub> =20V, V <sub>GS</sub> =12V		0.1		-		-	nA
I <sub>D</sub> (OFF)	V <sub>DS</sub> =20V, V <sub>GS</sub> =7.0V		-		0.1		-	nA
I <sub>D</sub> (OFF)	V <sub>DS</sub> =20V, V <sub>GS</sub> =5.0V		-		-		0.1	nA
I <sub>D</sub> (OFF)	V <sub>DS</sub> =20V, V <sub>GS</sub> =12V, T <sub>A</sub> =100°C		0.2		-		-	μA
I <sub>D</sub> (OFF)	V <sub>DS</sub> =20V, V <sub>GS</sub> =7.0V, T <sub>A</sub> =100°C		-		0.2		-	μA
I <sub>D</sub> (OFF)	V <sub>DS</sub> =20V, V <sub>GS</sub> =5.0V, T <sub>A</sub> =100°C		-		-		0.2	μA
BV <sub>GSS</sub>	I <sub>G</sub> =1.0μA	40		40		40		V
V <sub>GS</sub> (OFF)	V <sub>DS</sub> =20V, I <sub>D</sub> =1.0nA	4.0	10	2.0	5.0	0.5	3.0	V
V <sub>GS</sub> (f)	I <sub>G</sub> =1.0mA		1.0		1.0		1.0	V
V <sub>DS</sub> (ON)	I <sub>D</sub> =12mA		0.4		-		-	V
V <sub>DS</sub> (ON)	I <sub>D</sub> =6.0mA		-		0.4		-	V
V <sub>DS</sub> (ON)	I <sub>D</sub> =3.0mA		-		-		0.4	V

SYMBOL	TEST CONDITIONS	CMPF4391		CMPF4392		CMPF4393		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
$r_{DS(ON)}$	$I_D=1.0\text{mA}$ , $V_{GS}=0$		30		60		100	$\Omega$
$r_{ds(ON)}$	$V_{GS}=0$ , $I_D=0$ , $f=1.0\text{kHz}$		30		60		100	$\Omega$
$C_{iss}$	$V_{DS}=20\text{V}$ , $V_{GS}=0$ , $f=1.0\text{MHz}$		14		14		14	pF
$C_{rss}$	$V_{GS}=12\text{V}$ , $V_{DS}=0$ , $f=1.0\text{MHz}$		3.5		-		-	pF
$C_{rss}$	$V_{GS}=7.0\text{V}$ , $V_{DS}=0$ , $f=1.0\text{MHz}$		-		3.5		-	pF
$C_{rss}$	$V_{GS}=5.0\text{V}$ , $V_{DS}=0$ , $f=1.0\text{MHz}$		-		-		3.5	pF
$t_{ON}$	$I_{D(ON)}=12\text{mA}$		15		-		-	ns
$t_{ON}$	$I_{D(ON)}=6.0\text{mA}$		-		15		-	ns
$t_{ON}$	$I_{D(ON)}=3.0\text{mA}$		-		-		15	ns
$t_{OFF}$	$V_{GS(OFF)}=12\text{V}$		20		-		-	ns
$t_{OFF}$	$V_{GS(OFF)}=7.0\text{V}$		-		35		-	ns
$t_{OFF}$	$V_{GS(OFF)}=5.0\text{V}$		-		-		50	ns

All dimensions in inches (mm).



LEAD CODE:

- 1) DRAIN
- 2) SOURCE
- 3) GATE